

REMARKS

Reconsideration of the present application, as amended, is respectfully requested.

Claims 1-38 are pending in the Application, of which Claims 1, 22, 23, 32 and 38 are in independent form. Claims 1, 11, 19, 22, 23, 30, 32 and 38 have been amended above.

In addition, Fig. 2 has been revised above so that it shows the "arc tan" function. As noted in the remarks above, the revisions to Fig. 2 are supported in the specification and are also well-known in the art.

Also, a sentence in the first complete paragraph of page 13 of the specification has been amended above from "cot" to "arc cot" to correct a typographical error. No new matter is added. Claims 19 and 30 have been amended to include the term "comprise" as per standard U.S. claim drafting, and to also include "arc cot".

Turning to the Office Action, Claims 1-10, 12-32 and 38 were rejected under 35 U.S.C. 102(b) as anticipated by excerpts from the HP 48 Owner's Manual ("HP 48"). (Office Action, ¶¶ 2-34) Claim 11 was rejected under 35 U.S.C. 103(a) as unpatentable over HP 48 in view of "An Advanced Scientific Graphing Calculator" by Byrne, et al. (Office Action, ¶¶ 37-39) Claims 33-37 were rejected under 35

U.S.C. 103(a) as unpatentable over HP 48 in view of U.S. Patent No. 6,628,918 to Roschelle, et al. (Office Action, ¶¶ 40-47)

Focusing initially on the rejection of independent Claim 1, the Office Action cites the graphing capabilities of the HP 48 graphing calculator and, in particular, its purported ability to use the arctan and other functions with its graphics capabilities. (Office Action, ¶3 at pp. 3-4)

It is noted that pages 18.8-18.14 of the HP 48 document (cited on pp. 3-4 of the Office Action) do not show an arctan graph which the Office Action relies on for purportedly providing specific recitations of Claim 1. The Office Action indicates that the drawing of the arctan function provided by HP 48 would simply be a two dimensional graph of the function $y=\arctan(x)$ itself. (Office Action, ¶3 at p. 4)

By contrast, an important aspect of the invention is directed at applying a function (such as the arctan function) to scale a large set of input data points such that at least a select portion of the data points are displayable on a finite dimension of a display. Figs. 1 and 3a-3d of the application clearly illustrate examples of such scaling of a large set of received data points by mapping them to a target axis or dimension. Thus, in Figs. 3a-3d

for example, a large number of years received are mapped such that a select portion of the years are displayable along the horizontal axis. Mere graphing of the arctan function itself, as purportedly performed by HP 48, fails to teach this.

The invention as claimed has been amended to emphasize this feature, as well as to further distinguish it from HP 48's purported basic graphing of the $y=\arctan(x)$ function. Thus, Claim 1 has been amended above to recite, among other things, that the data set received is too large to display on "a target first dimension" of a display of finite dimensions and, further, that the control unit maps at least a displayable portion of data points contained in the data set onto "the first dimension" of the display by application of the recited equation. As noted, support for such amendment is clearly found in the figures and throughout the specification. (E.g., specification, p. 10 (lines 3-7), p. 13 (lines 3-10), p. 14 (lines 1-4))

For at least the above noted reasons, the HP 48 document does not show all of the recitations of Claim 1 and thus does not anticipate Claim 1.¹ Reconsideration and allowance of independent

¹ Although cited with respect to recitations of other claims, it is also submitted that neither Byrne nor Roschelle cure this deficiency of the HP 48 document with respect to Claim 1.

Claim 1 as amended is respectfully requested.

Independent Claims 22, 23, 32 and 38 have been amended in analogous manner and may thus be distinguished from HP 48 at least in like manner.² Reconsideration and allowance of Claims 22, 23, 32 and 38 is respectfully requested.

As noted, dependent Claims 2-10, 12-21 and 24-31 were rejected based on HP 48, dependent Claim 11 was rejected based on HP 48 in combination with Byrne, and dependent Claims 33-37 were rejected based on HP 48 in combination with Roschelle. As noted, neither Byrne nor Roschelle cure the deficiencies of HP 48 discussed above with respect to the independent claims. Thus, without conceding the patentability per se of dependent Claims 2-21, 24-31 and 33-37, it is submitted that they are allowable at least by virtue of their dependency on their respective independent claim.³ Allowance of dependent Claims 2-21, 24-31 and 33-37 is respectfully requested.

In addition, the separate patentability of dependent Claims 13 and 14 are specifically noted here. The Office Action points to the "zoom" features on pp. 18-22 to 18-24 of HP 48 for these

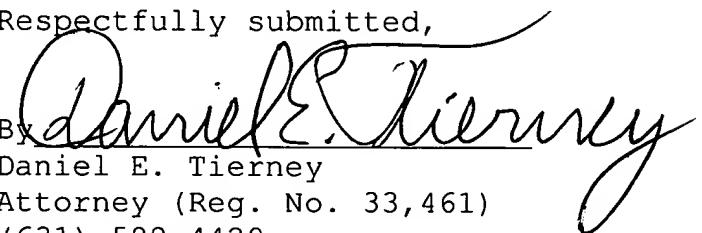
² Claim 22 has also been amended to correct a typographical error in line 5: "a" display has been changed to "the" display.

³ Dependent Claim 11 includes a conforming amendment.

claims. (Office Action, ¶¶ 14, 15) However, after application of the "zoom" feature as shown in HP 48, the scales of the axes are shown to be uniform, not "continually" changing as recited in Claim 13 (with additional analogous distinguishing recitation in Claim 14). For at least this additional reason, dependent Claims 13 and 14 are patentably distinct from HP 48.

In view of the above, it is respectfully submitted that all claims of the application, namely Claims 1-38, are in condition for allowance, and a Notice of Allowance is earnestly solicited. Should the Examiner believe that a telephone conference would facilitate resolution of any remaining matters, the Examiner may contact Applicant's attorney at the number given below.

Respectfully submitted,

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Attachment: Replacement drawing sheet
(1 sheet with FIGS 1 and 2)